



TITLE: INTEGRATED CIRCUIT PACKAGE HAVING BYPASS CAPACITORS COUPLED TO BOTTOM OF PACKAGE SUBSTRATE AND SUPPORTING SURFACE MOUNTING TECHNOLOGY
INVENTOR(S): Behdad Jafari and Ray Chen
USSN: 10/717,342 ATTORNEY DOCKET #: NVID-P000730

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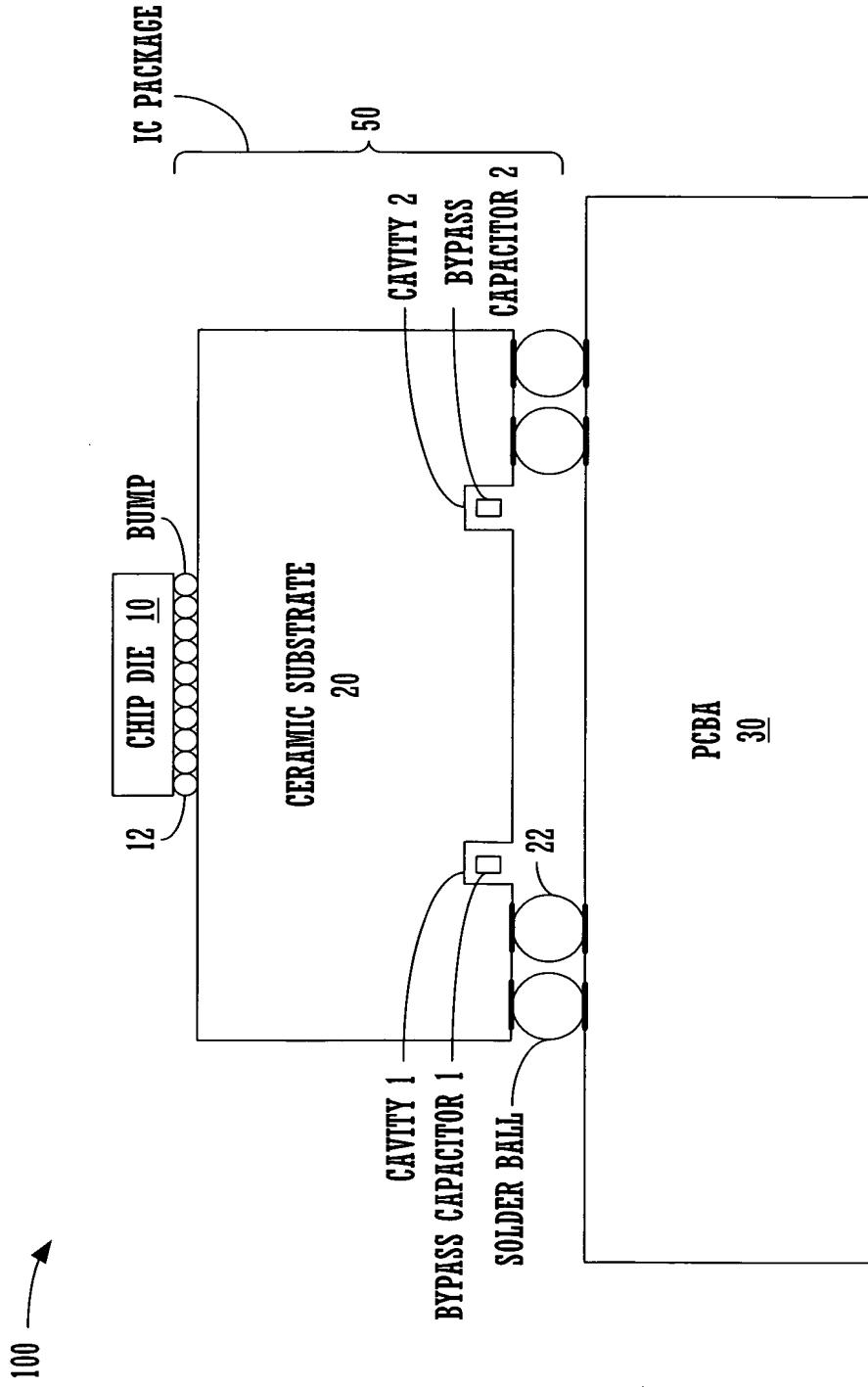


FIGURE 1
(Prior Art)

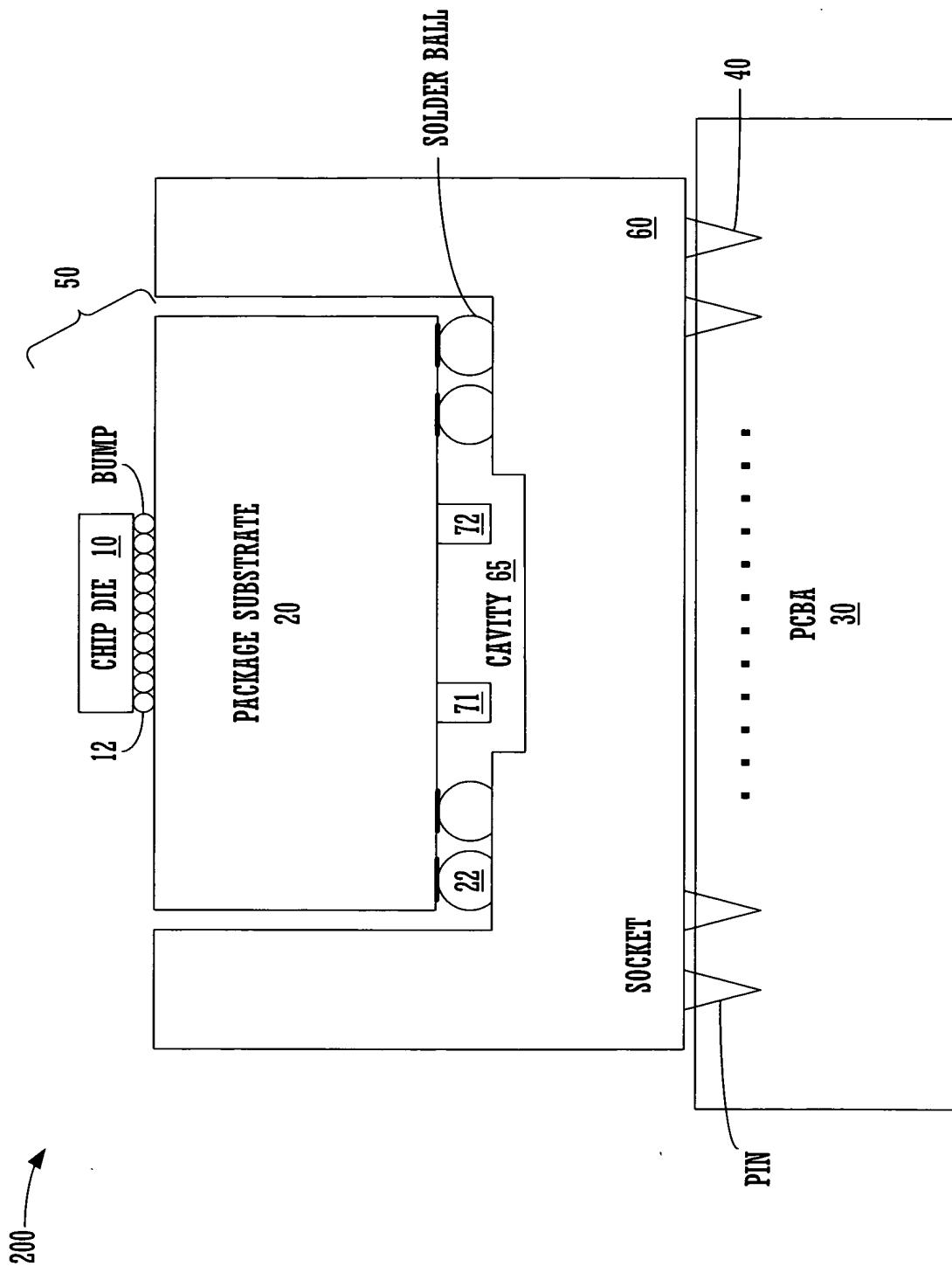


FIGURE 2
(Prior Art)

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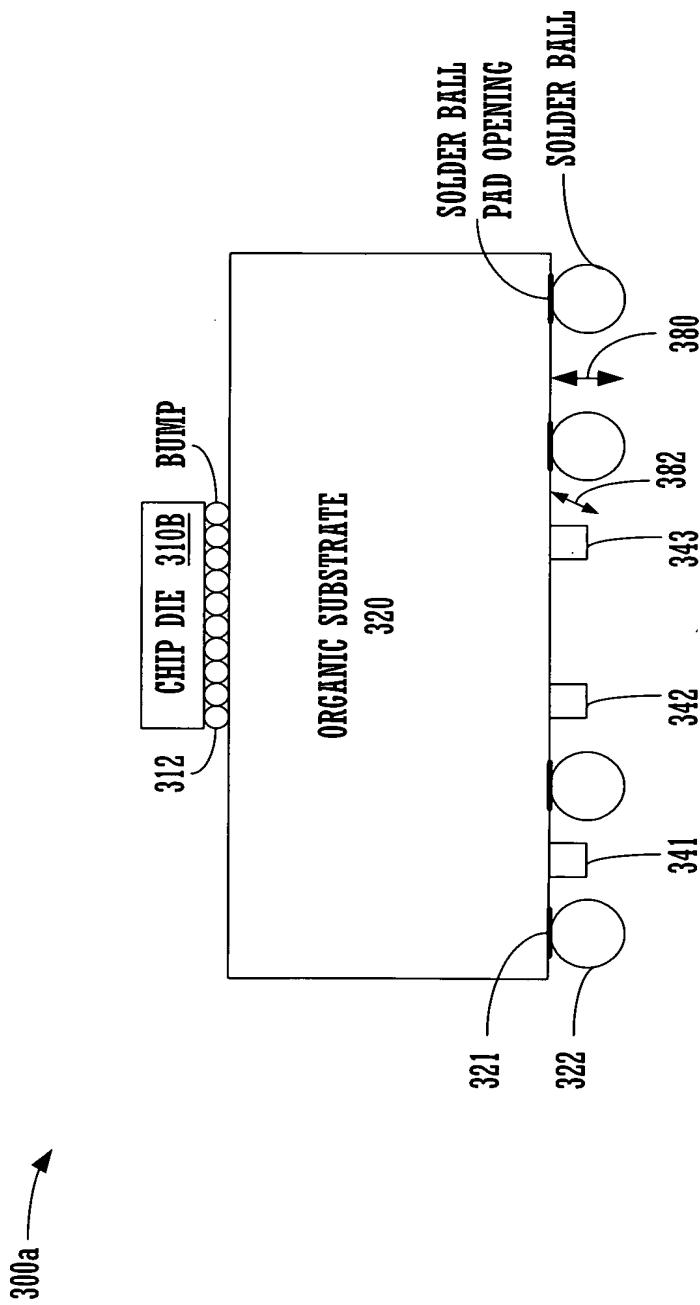


FIGURE 3A

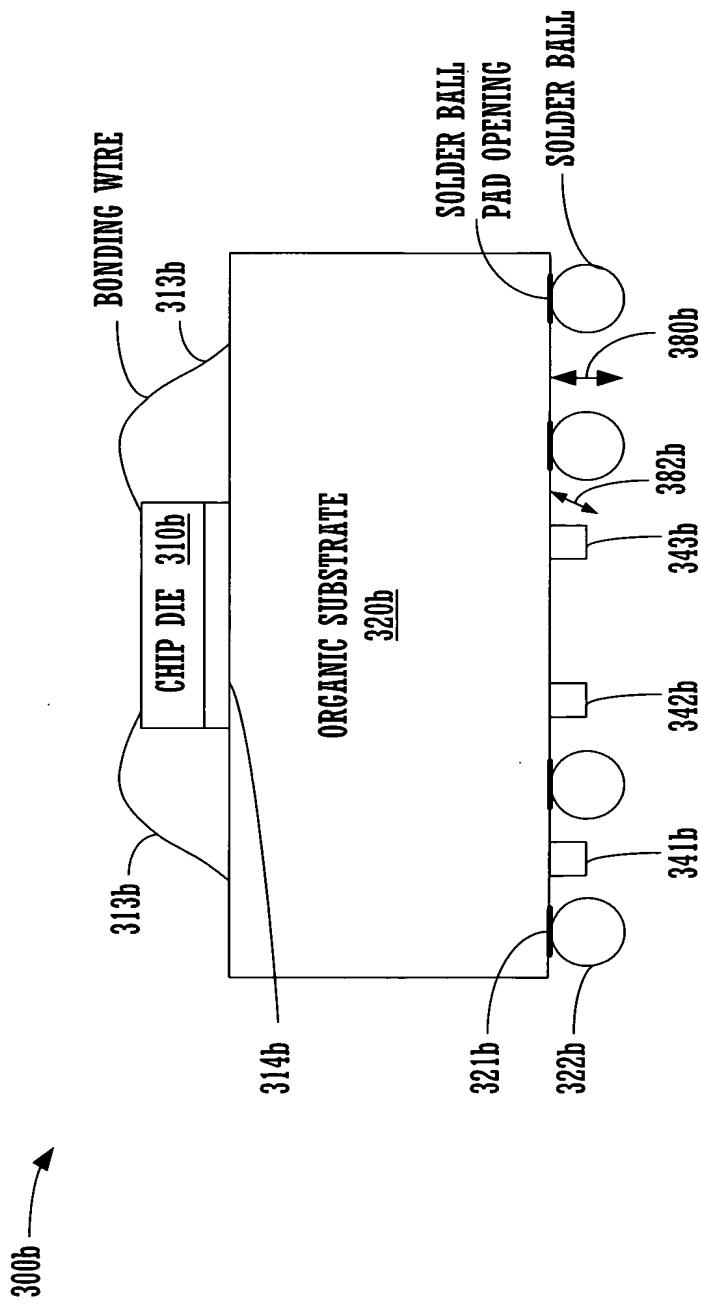


FIGURE 3B

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TOP VIEW

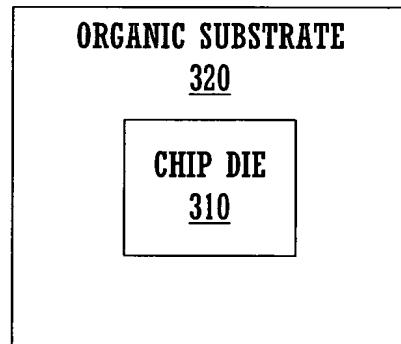


FIGURE 4A

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BOTTOM VIEW

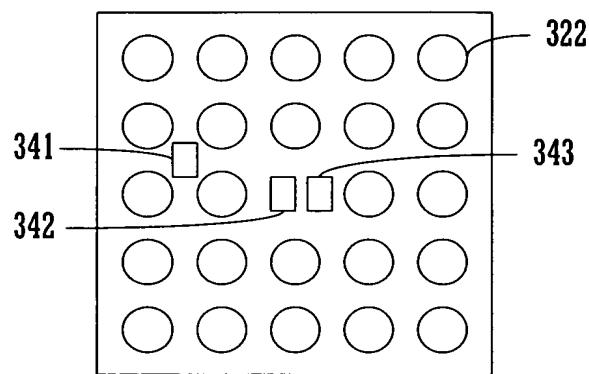


FIGURE 4B

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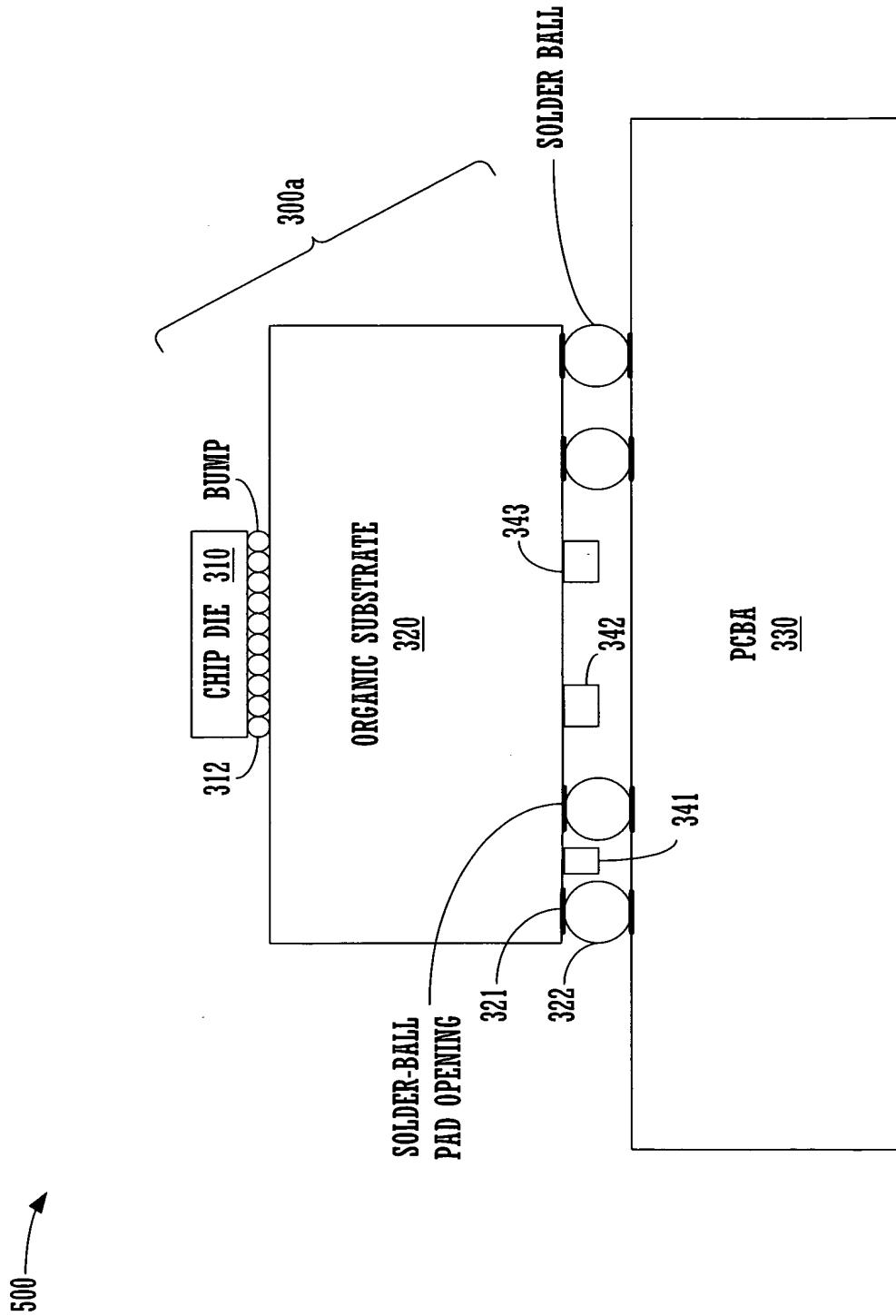


FIGURE 5

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FORM AN ARRAY OF SOLDER BALLS ON THE BOTTOM OF THE ORGANIC SUBSTRATE

610

COUPLE THE BYPASS CAPACITORS TO THE BOTTOM OF THE ORGANIC SUBSTRATE

620

PERFORM A REFLOW PROCESS AFTER FORMING THE ARRAY OF SOLDER BALLS AND COUPLING THE BYPASS CAPACITORS

630

USE ARRAY OF SOLDER BALLS TO SURFACE MOUNT THE INTEGRATED CIRCUIT PACKAGE TO THE PCBA

640

FIGURE 6